

over the row in a band 18 to 24 inches wide and incorporate thoroughly using a roto-tiller or spade to a depth of 6 to 8 inches. Preparing the beds in the fall will allow planting earlier in the season (late February to late March depending on the location). If the organic material is incorporated in the fall, any sulfur required to lower the pH can be added at the same time. Avoid opening a furrow, adding the organic material and planting directly in the pure organic material. Water and nutrient management is likely to be difficult in the pure organic material and plants are more likely to become weak and die.

Drainage - Blueberry plants require excellent soil drainage, so provisions for drainage must precede planting. Soil maps or observing the soil profile may be helpful in predicting internal drainage. Alternatively, digging a “dry well” can be a very effective means of determining soil drainage. Dig a hole(s) 6 to 8 inches deep and observe the water level following heavy rains. Water should not remain in the hole for more than 24 hrs, otherwise select another site or plant on ridges high enough for the water level to reach 6 to 8 inches deep within 24 hrs.

Irrigation - In most seasons and on most soils, irrigation is absolutely essential the year of planting. Hand watering with a hose is possible for several bushes, however, a soaker hose will usually give more uniform wetting. In larger plantings, systems using micro-sprinklers have been more successful than point-source drippers. Even 2 drippers per plant often do not wet enough of the soil in the root zone. At least 50% of the area under the drip line should be wetted. The irrigation system must be designed for the higher output of micro-sprinklers (about 10 gal per hr) compared with 1 or 2 gal per hr for drippers. Align the micro-sprinklers to avoid saturated soil around the crown of the bushes. The use of automatic timers on drip or microsprinkler irrigation systems can result in shallow root systems and root rotting if systems apply water daily. Apply irrigation no more than once every two days to reduce the chances of root rot infection.

Sun Versus Shade - Full sun is desirable but up to 50% shade is usually acceptable. However, yield is reduced with increasing shade, so plant in a sunny location to achieve maximum yield.

What Species - Both highbush (*Vaccinium corymbosum*) and the rabbiteye (*V. ashei*) types of

blueberries can be grown in the Coastal Plain and Piedmont. However, only highbush will consistently survive the minimum winter temperatures below 10° F that regularly occur in the Mountains. The rabbiteye is more drought and heat resistant and will tolerate a wider range of soil types than the highbush. For these reasons, rabbiteye is easier to establish and grow successfully in the Piedmont and on the drier soils of the Coastal Plain than highbush. More recently, a group of varieties referred to as southern highbush have been released. These varieties are intermediate between highbush and rabbiteye in soil and climate adaptation.

Varieties - Highbush varieties begin ripening in mid-May in the southeastern Coastal Plain and in early July in the Mountains. Rabbiteye varieties begin in mid-June in the southeastern Coastal Plain. More than one rabbiteye variety must be planted to provide the cross-pollination required for maximum yields. Following are varieties in order of ripening from early to late that have been grown successfully and are recommended for homeowners:

Coastal Plain - Highbush: ‘O’Neal’ (southern highbush), ‘Morrow’, ‘Reveille’, ‘Croatan’, ‘Murphy’, ‘Bounty’, ‘Blue Ridge’ (southern highbush), ‘Bluechip’, ‘Jersey’

Coastal Plain and Piedmont - Rabbiteye: ‘Climax’, ‘Premier’, ‘Tifblue’, ‘Powderblue’, ‘Centurion’. **Highbush:** ‘Blue Ridge’ (southern highbush) and ‘O’Neal’ (southern highbush) have also been grown successfully on Piedmont soils. ‘Legacy’ (southern highbush) is worthy of trial in these regions as well.

Mountains and Upper Piedmont - Highbush: ‘Duke’, ‘Sunrise’, ‘Blueray’, ‘Bluecrop’, ‘Toro’, ‘Berkeley’, ‘Jersey’

Planting

a) **Plants** - 2 or 3-year old nursery plants 12-36 inches tall will transplant well. The roots must be kept moist at all times between digging and replanting.

b) **Time** - Late winter (Feb-Mar) as soon as the soil can be worked is best for bare-root plants; Fall (Nov-Dec) planting has been successful on sandy soil in the southeastern Coastal Plain with bare-root plants and in the other areas with potted plants.

c) **Spacing** - Plant highbush varieties every 4-5 ft in the row and 8-10 ft between rows. Plant rabbiteye varieties every 6 ft in the row and 10-12 ft between rows.